Buy U. S. War Savings Bonds and Stamps

GEOGRAPHIC SCHOOL BULLETINS

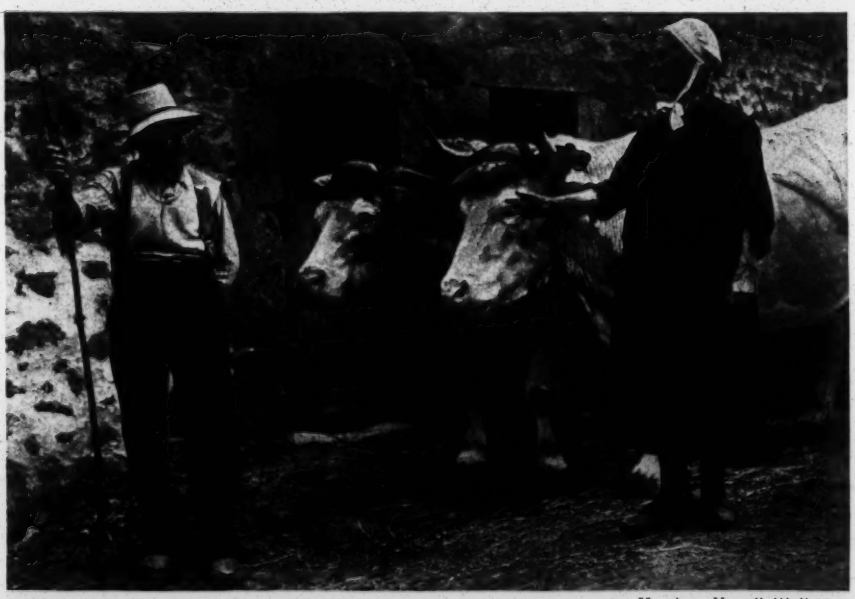
Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(The National Geographic Society is a scientific and educational Society, wholly altruistic, incorporated as a non-commercial institution for the increase of geographic knowledge and its popular diffusion. General Headquarters, Washington, D. C.)

December 4, 1944. Vol. XXIII. No. 10.

1. Luzon, Head Island of the Philippines
2. First Map of Contemporary Soviet Russia with English Names
3. Yanks in Europe: 1. France
4. The Telegraph Leaves Its Mark on Geography
5. Geo-Graphic Brevities: Metz—Liuchow



Harrison Howell Walker

THE MAN IN THE STREET IN FRANCE MAY BE THE FARMER IN THE DELL

In France, where more than half the people live by farming or fishing, the average man—"the man in the street"—is most likely to be represented by the small-scale farmer. American soldiers in France are making the acquaintance of such farm families as this couple in mountainous Morvan at Les Jallois, south of Paris. Wearing heavy wooden sabots with their work clothes, monsieur and madame are debating whether there is plenty of time to put the hay in the stone barn before dark. The patient cattle are doing double duty; they supply draught power for the hay wagon as well as milk for the family. While young Frenchmen fight, old Frenchmen work, to help their war-plagued country make a come-back among the big Allied nations (Bulletin No. 3).

UMI

GEOGRAPHIC SCHOOL BULLETIN

HOW TEACHERS MAY OBTAIN THE BULLETINS

The Geographic School Bulletins are published weekly throughout the school year (thirty issues) and will be mailed to teachers in the United States and its possessions for one year upon receipt of 25 cents (stamps or money order); in Canada, 50 cents. Originally entered as second-class matter January 27, 1922; re-entered as of April 27, 1943, Post Office, Washington, D. C., under Act of March 3, 1879. Copyright, 1944, by National Geographic Society, Washington, D. C. International copyright secured. All rights reserved. Quedan reservados todos los derechos.

Luzon, Head Island of the Philippines

LUZON, the site of Bataan and Corregidor, is a fighting word in the Philippines. The liberation of Luzon Island and Manila, Jap-held since 1942, is the ultimate aim of American bombers pounding Manila and of American forces storming northward across Leyte and Samar.

Luzon is an island of superlatives. It is the largest of the Philippines, the most populous, and the richest in resources. It is the site of Manila, biggest city in the islands, and of Manila Bay, their best harbor. It was the home before the war of 3,800,000 people, a fourth of the population of the islands.

Mountains Crowd the Coast and Cross the Interior

Except for the small Batan and Babuyan groups, Luzon is the northernmost of the 1,150-mile-long Philippine chain. Luzon's northern tip is 220 miles from Japan's rich colonial island of Formosa, and about 1,000 miles from Japan proper.

Big as the State of Kentucky, Luzon stretches about 485 miles in its curving north-to-south expanse from Cape Engaño, at its northeastern tip, to its southern end on San Bernardino Strait, the 12-mile gap between Luzon and Samar Island.

The shape of Luzon is so irregular that its width varies from 138 miles in the north to a scant 9 miles across the tail-like southeastern extension. The in-and-out coast line is 2,242 miles long. Bays and gulfs bite deeply into the land.

Mountains squeeze the coastal plains to a maximum width of 10 miles. The Sierra Madre chain forms a 350-mile wall along the eastern seaboard. Inland ridges in places are more than a mile high.

Volcanoes are active in the southeast. Mt. Mayon has erupted more than twenty times in the past century. Earth tremors have been frequent.

Rich with Gold and Sugar Cane

Biggest river is the Rio Grande de Cagayan, flowing through northern Luzon. Next in size are the Pampanga, coursing south into Manila Bay, and the Agno, running west into the Gulf of Lingayen. Most important commercially is the 15-mile-long Pasig, which connects Laguna de Bay, a large inland lake, with Manila Bay. Southwest lies Lake Taal, in the crater of a dead volcano.

Luzon has a cooler climate than the islands to the south. Rainfall at Manila totals 75 to 120 inches a year. Typhoons occasionally sweep over.

Forests are thick and varied. The trees yield valuable gums, medicinal extracts, and dyes. Hardwood stands are extensive.

Gold deposits have been worked for centuries on Luzon. Iron has been mined in the southeast. Copper, coal, and salt figure in the island's mineral wealth.

Rice is cultivated on terraced hillsides (illustration, inside cover). Bananas, pineapples, coconuts, betel nuts, and mangoes grow in abundance. Corn and sweet potatoes thrive. Sugar cane has been a commercial staple. The Cagayan valley produces excellent tobacco. Abacá, the so-called Manila hemp, grows on Luzon almost as well as on Mindanao, the center of its cultivation.

Manila, the capital, on the west coast at the head of Manila Bay, is the commercial and strategic key to the island. Sprawling along the Pasig, it was a city of more than 620,000 people in prewar days.. Growth of the city had pushed suburbs into areas that were once rice fields and mango groves.

Change accompanied the growth. Air-cooled buildings rose over mud flats.

UMI

J. Baylor Roberts

LUZON'S RICE FIELDS CLIMB ITS MOUNTAINS

Luzon's terraced rice fields carry cultivation of the Philippines' chief crop to 4,000-foot heights. Built in prehistoric times by the Ifugaos, headhunters of central Luzon, they show remarkable engineering skill. How the primitive builders learned their trade is a complete mystery. The terraces are edged with stone walls that rise 15 inches above the water when the rice is flooded. The stones must have been carried up from the river bed in the valley. The Ifugaos, with one operation, irrigated and fertilized the plants. The stream which they deflected to irrigate the crops was made to run first through decayed vegetable loam, manure, and ashes. It picked up the ingredients of fertilizer, which it deposited evenly over the rice crop. So accurately did the Ifugaos lay out the terraces that often in stretches of a half-mile the deviation in level was less than two inches. The crops from these rice terraces help to make Luzon the richest island in the embattled Philippines (Bulletin No. 1).

GEOGRAPHIC SCHOOL BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)
General Headquarters, Washington, D. C.

First Map of Contemporary Soviet Russia with English Names

THE FIRST and only detailed map, with English place names, of the contemporary Soviet Union has been announced by Dr. Gilbert Grosvenor, President of the National Geographic Society. It has been prepared as a supplement to the December issue of the *National Geographic Magazine*.

The thoroughly up-to-date map shows the Soviet Union as of October 1, 1944, according to the Russian treaties and claims set forth by that time, including the recent treaties with Finland and Romania.

Turning Russian Names into English

The map was a formidable task even for Geographic cartographic experts, whose charts now are widely used in the armed forces and by Government agencies.

Most of the more than 8,000 names which the map shows had to be transliterated into English spellings. The Russians use the 32-letter Cyrillic alphabet, based on Greek letters with others added. This alphabet looks queer to Americans, with C for S, P for R, H for N, and L upside down for G. Eight characters of the Russian alphabet do not exist in English; they represent sounds which are indicated in English by combinations—kh, zh, ch, sh, shch, yu, ya, and ts.

To handle the task of transliteration, Geographic cartographers and translators worked out improvements on the usual system for greater clarity. They eliminate two Russian letters which are not pronounced in Russian but are used to indicate the hard or soft pronunciation of other letters. These two characters often are represented in English transliterations by extra y's or by apostrophes.

Another feature of the Geographic system of transliteration is the use of a Y at the beginning of names which Russians pronounce but do not spell with an initial Y. Otherwise Yenisei would appear as Enisei.

Shows Strange Asiatic States

The Soviet Union comprises nearly one-seventh of the earth's surface and embraces nearly one-twelfth of the human race. It is almost three times as large as the continental United States. Its area is surpassed only by the total of the widely scattered lands in the British Commonwealth of Nations.

To picture the vast extent of the U.S.S.R., Geographic cartographers spanned the Eastern Hemisphere from Hamburg, Berlin, and Norway's Narvik on the northwest, to Tokyo on the southeast; from the Persian Gulf on the southwest to Bering Strait on the northeast. The scale of the map is 142 miles to the inch. The projection is based on the Deetz transverse polyconic projection.

Taking into account the treaties and claims as of October 1, 1944, the Soviet Union now has sixteen member republics, eleven old and five new, and an even larger number of autonomous republics.

Among the five new states are three along the Baltic Sea: the Estonian, Latvian, and Lithuanian Soviet Socialist Republics, which were Russian provinces before World War I and independent nations afterward until 1940. The new Karelo-Finnish Republic, which includes the former Finnish district of Petsamo, gives the Soviet Union a common boundary with Norway. The new Moldavian Republic in the southwest is made up principally of the old province of Bessarabia. This was Russian before World War I and Romanian from 1918 until 1940.

The map is dominated by the vastness of the Russian Soviet Federated Social-

UMI

Public health became an active civic concern. Women adopted American styles. American sports were popular. Movie-going caught the people's fancy. Movie-making took root as a local industry. A stock exchange was set up. Automobiles competed for space with "bull carts" pulled by carabaos (illustration, below).

Note: The Philippines are shown on the National Geographic Society's Map of Southeast Asia and Pacific Islands, on which Manila appears in a large-scale inset. A price list of maps may be obtained from the Society's headquarters, Washington 6, D. C.

For further information about the Philippines, see also "Mindanao, on the Road to Tokyo," in the November, 1944, *National Geographic Magazine;* "Facts about the Philippines," February, 1942, and "Return to Manila," October, 1940*; and these GEOGRAPHIC SCHOOL BULLETINS: "Leyte, First Steppingstone Toward Manila," November 13, 1944; "New War Chapter Opens in the Philippines," November 6, 1944; and "Luzon, Largest of the Philippines," January 12, 1942. *(Issues marked with an asterisk are included in a special list of Magazines available to teachers in lots of ten for $1.00.)*

Bulletin No. 1, December 4, 1944.

J. Baylor Roberts

ORIENT AND OCCIDENT COMPETED IN MANILA'S PREWAR STREETS

Manila's streets before the war offered marked contrasts between Occidental and Oriental ways of life, which combined to give the city a special atmosphere. On one side of the street a hatter displays his sign in English. A few stores farther down the street gigantic Chinese characters blaze forth on a long white banner. The automobiles appear to have given up the struggle for traffic space and retired to park by the curb on each side of the street. Only one (center) has the hardihood to compete with the line of horse-drawn *carromatas* moving in both directions. A carabao cart (foreground) pauses to survey the situation before advancing into the fray.

GEOGRAPHIC SCHOOL BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Yanks in Europe: 1. France

(This is the first of a new series of bulletins about European countries where Yanks are fighting.)

WITH France again one of the Allied "Big Four," Yanks in that country are watching the battered nation regain her proud place in the world.

The strong uprising of the Maquis, which accompanied the liberation of the country by mighty Allied armies, recalled revolts of the French masses against tyranny and aggression in 1789 and 1871.

In spite of regional differences, France early developed into a unified nation which always bounced back after reverses. Where patriotism is concerned, a Frenchman is first a Frenchman and second a Norman, a Breton, or a Gascon. French ideals of liberty, equality, and fraternity, with the political ideal of people's government, have had a great influence toward the betterment of life.

The Land Mirrors People's Likes

The Yanks now see what the German aggressor wanted: the rich wheatlands of the Paris Basin and Aquitaine; the wines of Champagne, Medoc, and the Rhône; the silk mills of Lyon; the iron mines of Lorraine; the sleek cattle of Normandy. Another attraction was Paris, "city of light" (illustration, next page).

The last census gave Paris proper 2,830,000 inhabitants, slightly more than the borough of Brooklyn in New York City, but metropolitan Paris counted more than four million.

The land of France mirrors the people. They are lovers of good food and white bread; wheat grows to the very outskirts of Paris. They have wine with every meal; tenderly cared-for vineyards cover south-sloping hillsides everywhere except in the north. They enjoy fine fabrics; Europe's early textile industry developed mainly in France and before the outbreak of war this was still the country's largest industrial activity.

The Central Massif is an upland area of old mountains worn down to an average height of 3,000 feet. Two easy travel routes circle the plateau, following the Rhône valley and the Garonne valley. Mountain passes are so low that canals, as well as railroads and splendid highways, cross them.

Paris Basin Self-Sufficient

The Mediterranean section reaches inland to the mountains and up the Rhône valley almost to Lyon. It is distinctly sub-tropical. East of Toulon, where Allied beachheads were established, the rocky Riviera basks in the sun.

For general agriculture the south of France has too much sun and too little rain. Summer drought calls for irrigation, in which France leads Europe. This area grows most of the grape crop, making France the leading wine producer.

The Rhône delta, the Camargue, is France's miniature Texas, a flat, grassy expanse largely devoted to cattle raising. Farther up the valley, mulberry groves are reminders that French cocoon growers started Lyon on its career as prewar Europe's silk center.

The Aquitaine Basin around Bordeaux and the Garonne River is the southwestern extremity of Europe's great northern plain that stretches to Russia. Like the Mediterranean region, it is warm and grows grapes; like the north, its main crop is wheat and its rain is abundant. Toulouse, on the edge, was prewar France's

ist Republic, the largest of the sixteen member republics. With the autonomous districts included in its territory, it comprises 75 per cent of the area of the U.S.S.R. It spans eastern Europe and all of Asia for almost 5,000 miles east and west.

While some of the republics are too small to subdivide, this map shows the autonomous subdivisions of the Russian S.F.S. Republic, the Kazakh S.S.R., and the Uzbek S.S.R. It brings to light such rarely heard-of states as the Kara-Kalpak, Udmurt, Buryat-Mongol, and Mari Autonomous S.S. Republics. It reveals too the disappearance of the formerly autonomous unit of the Volga Germans.

Among the unfamiliar place names of Asia the map offers such surprises as Pavlodar, Akmolensk, Kzyl Orda, and the Kirgiz S.S.R. (illustration, below).

Note: The Map of the U.S.S.R. (Soviet Russia) may be obtained from the Society's headquarters. Printed in ten colors, the map is 40 inches by 25 inches. The cost per copy is 50 cents on paper or $1 on linen, postpaid in the United States. An Index to the 8,016 names on the map may be purchased for 25¢.

The December, 1944, issue of the *National Geographic Magazine* contains, in addition to the map supplement, an article, "New Roads to Asia," with information on the people of Asiatic Russia; and 26 color photographs, "Sunny Siberia." Additional information about the U.S.S.R. may be found in "Liberated Ukraine," May, 1944; "I Learn About the Russians," November, 1943*; "'Magnetic City,' Core of Valiant Russia's Industrial Might," May, 1943*; "Mother Volga Defends Her Own," December, 1942; and "Roaming Russia's Caucasus," July, 1942*.

Bulletin No. 2, December 4, 1944.

Sovfoto

THEIR FATHERS WORE QUILTED KIMONOS AND RODE YAKS; THESE KIRGIZ FLY

Only the faces of these Kirgiz tribesmen of Central Asia betray their Mongolian ancestry. They are sons of nomads who lived in collapsible felt *yurts* and followed their herds across the grasslands of Asia. Instead of the ancestral costume of padded cotton kimono, these men wear aviators' outfits. They can handle a plane as their fathers handled yaks, camels, and horses. Their home country, the Kirgiz S.S. Republic, was a land of slow caravans a generation ago. In their Asiatic fastness these men learned to fly in a plane belonging to their flying club; later such Asiatic airmen saw service in the defense of Moscow and Stalingrad. The plane is labeled "Kirgizski Aeroklub," the English word "club" having been adopted by the Russians. It is spelled with a "K" in Russian because a "C" would be pronounced "S." Such lettering in the Cyrillic alphabet had to be transliterated into English spellings for the new Map of the U.S.S.R. just released by the National Geographic Society.

GEOGRAPHIC SCHOOL BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

The Telegraph Leaves Its Mark on Geography

"WHAT hath God wrought"—that was the first message sent by Samuel F. B. Morse's electric telegraph, from Washington to Baltimore on May 24, 1844.

A century later, it is surprising to see what the telegraph has wrought. The world's land areas are crisscrossed with seven million miles of telegraph wire. One-third of it is in the United States.

The effect of the telegraph on the diplomacy, trade, and military strategy of a century is written into history. The invention has affected geography as well, and its name appears in many spots on the map.

Combining Greek *tele,* "afar," and *graphein,* "to write," the word "telegraph" still means, as it meant before Franklin experimented with key and kite, "an instrument that answers the end of writing by conveying intelligence to a distance through the means of signals."

Telegraph Hill Antedates Telegraph

Well known among place names that employ the word applied to Morse's invention are Telegraph Hill, Winchester, England, 50 miles southwest of London, and Telegraph Hill overlooking the harbor in San Francisco, California. The former was so named long before the electric telegraph became a reality.

On Telegraph Hill, Winchester, before the days of electricity, stood one of several hilltop semaphore towers. Spotted at ten-mile intervals across the countryside, they enabled the Admiralty in London, with the aid of telescopes, to maintain rapid communication with Royal Navy ships 70 miles away off Portsmouth and Southampton.

Landmark of San Francisco's early decades was the telegraph station on Telegraph Hill. From 1853 on, it received information about ships approaching over the horizon by electric wire telegraph from Point Lobos, the city's easternmost tip. It then conveyed the information to all settlers by ancient non-electric telegraph—semaphore arms set to indicate the type of ship. Arms at a wide angle made a welcome signal: it meant a side-wheel steamer, the kind that brought mail from folks back east.

British Columbia Has Telegraph "Rash"

Telegraph Hills rise in London, in Alaska, near Plymouth Harbor in Massachusetts, and on Brac, largest of Yugoslavia's Dalmatian Coast islands in the Adriatic Sea.

The place most marked with names inspired by the Morse invention is Canada's British Columbia. Around 1860 a series of mishaps had befallen repeated attempts to lay a cable across the Atlantic Ocean. As a result, work began in 1864 on a telegraph line to join the New World with the Old across Bering Strait. The route lay, roughly, up the Fraser River and down the Yukon. Wire was hauled into place and prepared for stringing as far north as Telegraph Creek, 58 degrees north latitude. Then, in 1866, Cyrus Field's success in completing the Atlantic cable caused overnight abandonment of the Bering Strait telegraph project.

For decades thereafter there was no operating telegraph line within a thousand miles of Telegraph Creek. Then a Hudson's Bay Company post for trading, it is now a small mining camp with post office and telegraph station.

fastest growing city, with industries powered by Pyrenees streams.

The Paris Basin is the north-central fourth of France. Breadbasket, dairy barn, and butcher shop, this basin is one of the most self-sufficient regions in the world. Paris relies on it almost entirely for sustenance—a direct contrast to London, which imports nearly all its foods.

Along the border of Belgium and in disputed Lorraine lie France's mineral riches. France ranks first in Europe (outside the U.S.S.R.) in iron ore reserves, but lack of coking coal has made her steel industry a poor fourth in Europe.

Beyond the Paris Basin lies the area generally referred to as "the west." It includes the western half of Normandy (the "bocage" country), all of Brittany, and the Vendée, south of Nantes. Parisians joke about Norman and Breton provincials, but are glad to have the west's rich butter and cheeses.

In area, France equals Texas without the Panhandle. Her prewar population (42,000,000) was nearly seven times that of the Lone Star State, but less than England's or Italy's and far below that of Germany. More than half were farmers or fishermen living in small villages (illustration, cover).

Note: France is shown on the Society's Map of Central Europe and the Mediterranean.

For further information, see "The Coasts of Normandy and Brittany," in the *National Geographic Magazine* for August, 1943; "Rehearsal at Dieppe," October, 1942*; "France Farms as War Wages," February, 1940*; and "Normandy—Choice of the Vikings," May, 1936*.

See also these GEOGRAPHIC SCHOOL BULLETINS: "These French Places Lent Their Names to English," October 9, 1944; "Where Are the Yanks? 13. Normandy, France," October 2, 1944; and "Upper Savoy, France's 'Boiling-Over Battlefield' in the Alps," April 5, 1943.

Bulletin No. 3, December 4, 1944.

W. Robert Moore

SEINE-SIDE STALLS AND NOTRE DAME HAVE BEEN TRADEMARKS OF PARIS

American soldiers are seeing the sights that have made Paris "the world's city." World travelers in prewar years made it their second home. Stay-at-homes in every land felt its influence. It maintains a unique position in the cultural world although in the past few decades several cities have surpassed it in size and commercial importance. For its place in France's civil and religious history, for architecture, for Hugo's *Hunchback of Notre Dame*, the 12th century Gothic cathedral is world-famous (center background). The outdoor stalls beside the Seine River, selling books, etchings, prints, and water colors to neighborhood passers-by and travelers from two hemispheres, have played a small but steady part in spreading the tradition of Paris as a center of culture.

GEOGRAPHIC SCHOOL BULLETIN

Published Weekly by

THE NATIONAL GEOGRAPHIC SOCIETY

(Founded in 1888 for the Increase and Diffusion of Geographic Knowledge)

General Headquarters, Washington, D. C.

Geo-Graphic Brevities

Metz, War Prize of Old French-German Boundary Changes

METZ, the obstacle which American forces had to hurdle in their advance along the Moselle valley route into Germany from eastern France, is one of the most strongly fortified cities of western Europe. It is 25 miles southwest of the border near the point where France, Luxembourg, and Germany meet. Metz stands at the junction of the Moselle and the Seille rivers.

Situated in Alsace-Lorraine, it has shared the football fate of these border provinces in being shifted between France and Germany for years. Since the Versailles Treaty restored the region to France, Metz has been capital of the Department of Moselle.

After the Germans took Metz from France in 1870, they increased its defenses until it was one of the most heavily fortified cities in the world. Immediately after the Germans moved in, thousands of the French residents abandoned the city and moved to French territory.

When industrial development made additional houses necessary, the Germans destroyed the old ramparts to make room for them. Later, when the growing city needed still more space, it spread to the islands in the Moselle River, crossed by 14 bridges.

When Metz was restored to France at the close of the first World War, its population numbered fewer than 63,000. With the ensuing growth of industry, Metz, at the outbreak of World War II, had developed into a thriving city of 85,000 people.

The nearness of coal and iron has fostered the development of a steel industry at Metz. Iron ore deposits extend from a little south of Nancy to the border of Belgium. Coal is available from Vosges mines and from an extension of the Saar coal field into Lorraine.

The city's lighter manufactures included shoes and canned fruits and vegetables. Germany, after 1870, introduced the making of strawberry and plum preserves, which became one of the city's chief industries.

It was from Metz that the young captain of dragoons, Lafayette, left for a Spanish port to sail to America to aid George Washington.

Note: Metz is shown on the National Geographic Society's Map of Germany and Its Approaches, published as a supplement to the July, 1944, *National Geographic Magazine*.

* * * * *

Liuchow, Lost American Air Base in Kwangsi Province

THE last of the Yank air bases of east and south China was lost with the destruction of Liuchow in the face of Japanese advance. It lies in the heart of Kwangsi Province, about 200 miles north of China's Gulf of Tonkin coast. It is about 400 miles southeast of Chungking, about 100 miles southwest of Jap-taken Kweilin, peacetime capital of Kwangsi.

Liuchow was the only town of Kwangsi Province where three rail lines met. The most important of these linked the city with Kweilin and Hengyang to the northeast, now in Japanese hands. The other two lines ran to points about 100 miles northwest and 45 miles south. Extensions of these railroads were projected or under construction when the Japs brought work to a standstill.

UMI

Southeast 500 miles along the Fraser River reach of the abandoned telegraph route is the Telegraph Range of mountains. Along the British Columbia coast from Victoria to the Skeena River are Telegraph Cove, Telegraph Bay, Telegraph Harbor, Telegraph Passage, Telegraph Point.

Telegraph Plateau is the name given to the shallow ocean bottom between Newfoundland and Ireland, where a score of cables now cross. Deeper bottom might have added misfortunes and years of delay to completion of the first Atlantic cable.

Telegraph, Texas, has no telegraph. Telephone, Texas, has. Telegraph Creek, Montana; Telegraph Point, New South Wales—the list is endless. Mariners are especially telegraph conscious, using the name for reefs, shoals, rocks, and points all around the world.

Bulletin No. 4, December 4, 1944.

Clifton Adams

HERE, THE CLICK HEARD ROUND THE WORLD PUT A NAME ALL OVER THE MAP

Samuel F. B. Morse's pioneer telegraph office on this site in 1844 started the telegraph on its way to the map. Since then the name has been applied to towns, creeks, mountains, and submarine plateaus. The spot where Morse clicked out messages for the first public telegraph office, under the direction of the Post Office Department, is on 7th Street in Washington, D. C., where a substation of the District of Columbia Post Office now stands.

From Liuchow five main highways radiate. Several rivers—always an important factor in Chinese transportation—flow by or near the town.

Liuchow lies on the Liu River, a tributary of the Hungshui (Red Water), popularly called the West River. With the exception of one broad, fairly open area between Liuchow and the Hungshui, the surrounding country is hilly and mountainous (illustration, below).

The mountains of Kwangsi Province are relatively low, but their limestone formations are fantastically varied, broken up and carved into sheer precipices and jagged peaks.

Deep caves, sinkholes, and disappearing rivers are striking features of the topography, which resembles the "karst" structure in the limestone regions of Yugoslavia. Many of Kwangsi's river valleys are narrow, limiting the sites for airfields.

Note: Kwangsi Province may be located on the Society's Map of Southeast Asia and Pacific Islands, published as a supplement to the October, 1944, issue of the *National Geographic Magazine*.

For additional information about how the war has affected China, see "Exploring Wild West China," in the *National Geographic Magazine* for June, 1944; "6,000 Miles over the Roads of Free China," March, 1944; "China Opens Her Wild West," September, 1942*; and the following GEOGRAPHIC SCHOOL BULLETINS: "Kweilin, American Flyers' Lost Eyrie in Kwangsi," October 16, 1944; and "China Goes West to Win," October 18, 1943.

"Landscaped Kwangsi, China's Pictorial Province," in the December, 1937, issue of the *Magazine* describes the province in peacetime.

Bulletin No. 5, December 4, 1944.

T. C. Lau

KWANGSI'S BUMPY HILLS ARE HOME TO THE FARMER—HAZARD TO THE FLYER

Although railways, roads, and rivers fan out starwise from Liuchow, former U.S.A.A.F. base, this region in central Kwangsi is one of the most sparsely settled in southern China. Farming is the chief occupation of the people in this remote inland district. The water buffalo still draws two-wheeled wooden carts to work in the rice fields or on the tung-oil plantations. This ever-useful beast also powers the stone mortar that grinds the tung nuts from which the oil is pressed. Jutting from the plateau of Kwangsi are strange limestone hills, some of them flat-topped like southwestern United States mesas, others sharp-peaked, others with the bumpy outlines of crouching animals (background). These peaks and humps, threatening any emergency landings, are a natural hazard to U. S. flyers operating in this region now that the Liuchow and Kweilin bases have been destroyed.